

Product datasheet for **MG209864**

Arhgap18 (NM_176837) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arhgap18 (NM_176837) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arhgap18
Synonyms:	4833419J07Rik; AI314906; AI843501
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG209864 representing NM_176837
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGAAGTGGCTATCGAGTTCCTCGGAGTTGTGCTAACTGCTTACCACCCAGCGCAAGGACCAGGTCTG
 CTGGGGACAGCCATGTAAAGGGAGGCGACGAAGCCACCTCCAGTCGCAGATATGGCCAATACACCATAAA
 CCAAGAAGGCTCCACCAAGTTCCCGAGAGGCCTCCATTGATCGATCGAGTTCTCAGGATTCTTTGGAT
 GAATCAATGGAAGCCTATTGGACAGAACTAGAAAAATCAAGAGGTGCAATGAAAATCGCCAAGAAGGTC
 AAGAGGCCATAGTTGTCAAAGAACCTGATGAGGGAGAAGTGAAGAAGAATGGCTCAAAGAAGCAGGTCT
 ATCCAATCTTTTGGAGAGTCTATTGATGACCCGAGGAAAGCATTCTGTTTTTCTACACTGACCCGG
 ACTCAGGCAGCAGCTGTTCAAAACGGGTGAAACGGTCTCCAGACCTTGAGGAAGAAAAACAACAGC
 ACCACATTCGTGACGTCAGAGACATATTTGCTCAACAGAGAGAGGCACAAGAAAAACCTCCAGATGACTC
 AGACTTGGGTGCTCAGTCAACAAACGAAAAAAGGCCAAGGAAAAGATGATCAGCCATCTAGTGGGGCT
 GTCGATAGCAAGGAGCAGATCTACGGGTGCCTGAGGACACACCTGCCTCTGAAACAGACATCAATCTGG
 AGGTGTCAATTTGCGGAGCAAGCTGTCAATCAGAAAGAGTTCAGTAAGGAGAGGACGCAAGATCAGCAG
 CAACGACTCTTTGCCAGTTTCAGACTGCCAAAAGATAAAACAGGTACGACAAGGATTGGAGACTTGGCA
 CCCAAGACATGAAGAAAGTTTGTCTCTATCCCTGATTGAACCTCACTGCCCTGTATGATGTGTTGGGCT
 TGGAAATCAAACAACAGAAAGCTGTGAAAATCAAACAGAGACTCTGGTCTTTTGGTATTCTTTAAAC
 GATATTGTTAGAACAAGATCAAAGAAAAGTGCCTGGAACACGAATACCCTTGATCTTTCAAAACTGATT
 TCTCGAATTGAAGAAGGCAGTCTGGAACCGAGGGCCTCTACGGATACCAGGAGCAGCCATGAGAATCA
 AGAATCTTTGCCAAGAACTAGAAGCGAAATTTACGAGGGGACTTTCAATTGGGAAAGTGCAACAGCA
 CGATGCGGCCAGCCTGCTGAAGCTCTTTCTGAGAGAATTGCCCCAGCCACTGCTGAGCATGGAGTATCTC
 AAAGCCTTCCAAGCTGTCCAGAATCTTCCAACCAGAAAGGAACAGTTGCAGGCTTTGAACCTCCTTGTC
 TTCTTCTACCTGACGCAACAGAGACACACTGAAGGCCTTGCTTGAATTTCTCCAAGAGTCATAGATAA
 CAAAGAGAAGAACAAGATGACAGCTGGGAATGTAGCAATGGTCATGGCCCCAAATCTCTCATGTGCCAC
 ACGCTGGGCTTGAAGTCCAGTGAACAGCGAGAATTTGAAATGGCAGCTGGGACAGCAATGTCATGCACT
 TATTGATTAGGTACCAGAAAATCTATGGACAATCCCTAAATTTATTGTAATCCAAGTGAGGAAACAGAA
 TATTGAGAATCAAAGAAGGAAAGGAAAGCCATGAAGAAATGCTGAAGAAAATGGCTTATGACCGGGAA
 AAACATGAAAAGCAAGATAAACTGCAATGGTGCTGATGTTCTCAGGGAGTGATTGAGTGCAAGCTC
 CCCATCTTTCAAAGTTTCCATGGCAATACAGCTAACTGAAGAACTAAAAGCCAGCGATGTGCTTGCCAG
 GTTTCTCAGCCAAGAAAGTGGGGTTGCCAGACACTCAAGAAAGGAGAAGTTTTCTGTATGAGATTGGA
 GGAAATATTGGGGAACGTTGCCTCGATGACGACACACATGAAGGACTTGTAACCACTGAACCCGAATG
 CCGAGTGGGTCATAAAATCCAAGCCAGTG

ACGCGTACGCGGGCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG209864 representing NM_176837
Red=Cloning site Green=Tags(s)

MNWLSSSSGVVL TAYHPSGKDQVAGDSHVKGGEATSSRRYGQYTIQEGSTKVPERPPFDRSSSQDSL
 ESMEAYWTELENIKRSNENRQEGQEAIVKEPDEGELEEEWLKEAGL SNLFGESIDDPQESILFLSTLTR
 TQAAAVQKRVTVSQTLRKKNKQHHRDVRDIFAQQREAEKPPDDSLRSVRTNENKGQKDDQPSSGA
 VDSKEQISRPEDTPASETDINLEVSFAEQAVNQKEFSKERTQKISSNDSLPSFRLPKDKTGTRIGDLA
 PQDMKKVCSLSLIELTALYDVLGLEFKQKAVKIKTRDSGLFGIPLTILLEQDQKRVPGTRIPLIFQKLI
 SRIEEGSLETEGLLRIPGAAMRIKNLCELEAKFYEGTFNWEVSKQHDAAASLLKFLRELQPPLLSMEYL
 KAFQAVQNLPTKEQLQALNLLVILLPDANRDTLKALLEFLQVRIDNKEKNKMTAGNVAMVMAPNLFMCH
 TLGLKSSEQREFEMAAGTANVMHLLIRYQKILWTIPKFIVQVRQNIENQKKERKAMKLLKKMAYDRE
 KHEKQDKTANGADVPQGVIRVQAPHL SKVSMAIQLTEELKASDVLARFLSQESGVAQTLKKGEVFLYEIG
 GNIGERCLDDTHMKDLYQLNPNAEWIKSKPV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_176837

ORF Size: 1989 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_176837.2](#), [NP_789807.1](#)

RefSeq Size: 3616 bp

RefSeq ORF: 1992 bp

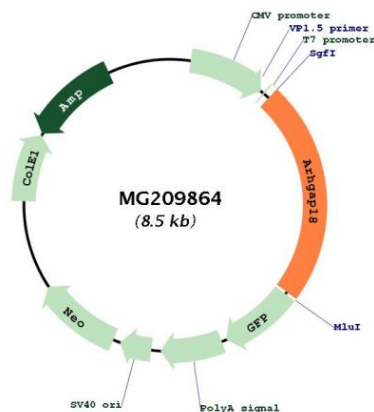
Locus ID: 73910

UniProt ID: [Q8K0Q5](#)

Cytogenetics: 10 A4

Gene Summary: Rho GTPase activating protein that suppresses F-actin polymerization by inhibiting Rho. Rho GTPase activating proteins act by converting Rho-type GTPases to an inactive GDP-bound state. Plays a key role in tissue tension and 3D tissue shape by regulating cortical actomyosin network formation. Acts downstream of YAP1 and inhibits actin polymerization, which in turn reduces nuclear localization of YAP1. Regulates cell shape, spreading, and migration (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209864